ELSEVIER

www.elsevier.nl/locate/jorganchem

Journal of Organometallic Chemistry 614–615 (2000) 331–333

Journal of Organometallic Chemistry

Contents of Volumes 614–615

Foreword 3

Reviews

Symmetric and asymmetric cleavage of the lighter boron hydrides and of metal salts – the role of the dielectric constant
R.W. Parry 5

Is there a future for the continued development of the chemistry of small cage C_2B_4-carborane? A historical perspective
N.S. Hosmane, J.A. Maguire 10

The chemistry of bridged borylene complexes
H. Braunschweig, M. Colling 18

Chemistry of nickel and iron bis(dicarbollides). A review
I.B. Sivaev, V.I. Bregadze 27

The use of boron clusters in the rational design of boronated nucleosides for neutron capture therapy of cancer
W. Tjarks 37

Forced *exo-nido* rhoda and ruthenacarboranes as catalyst precursors: a review
F. Teixidor, R. Núñez, M.A. Flores, A. Demonceau, C. Viñas 48

Communications

B-frame supported bimetallics. 'Composite cluster' compounds and the structures of [2,7-(η^5-C_5Me_5)$_2$-*nido*-2,7,8,6-$Ir_2CSB_6H_8$] and its 9-chloro derivative. Synchrotron and conventional X-ray studies
P.A. Cooke, C. O'Dowd, M.G.S. Londesborough, J. Holub, B. Štíbr, M. Thornton-Pett, W. Clegg, S.J. Teat, J.D. Kennedy 57

Bond rotamers and calculated ^{11}B-NMR chemical shifts in boron-containing cluster chemistry. Some effects in the {*nido*-7,8,10-PC_2B_8} system
D.L. Ormsby, R. Greatrex, B. Štíbr, J.D. Kennedy 61

Molecular and crystal structure of an iodo-gold-silver-platinum cluster, $[(Ph_3P)_6Au_6Ag_6Pt(AgI_3)_2](THF)_2$, with a trimetallic icosahedral core capped with two planar [AgI_3] units
B.K. Teo, H. Zhang 66

Homoleptic triisopropylsilylarsandiides of magnesium and divalent tin
M. Westerhausen, N. Makropoulos, H. Piotrowski, M. Warchhold, H. Nöth 70

Regular Papers

New alkyne bridged mixed-metal clusters and studies of their activity for catalytic hydrosilylation of alkynes
R.D. Adams, U. Bunz, B. Captain, W. Fu, W. Steffen 75

New Group 9 metal complexes containing *N,P*-chelate ligand system. Synthesis, characterization and application to catalytic hydrogenation
H.-S. Lee, J.-Y. Bae, J. Ko, Y.S. Kang, H.S. Kim, S.-J. Kim, J.-H. Chung, S.O. Kang 83

Comparison of the geometric and molecular orbital structures of $(Cp^*Cr)_2B_4H_8$ and $(Cp^*Re)_2B_4H_8$, $Cp^* = \eta^5$-C_5Me_5. Structural consequences of delocalized electronic unsaturation in a metallaborane cluster
S. Ghosh, M. Shang, T.P. Fehlner 92

Synthesis and coordination behavior of a zirconocene bis(borylphosphane)
T. Chen, E.N. Duesler, H. Nöth, R.T. Paine 99

Synthesis and characterization of half- and full-sandwich lanthanacarboranes of the C_2B_9-carborane ligand. X-ray crystal structures of [$LnCl_2(THF)_5$][*nido*-$C_2B_9H_{12}$] (Ln = Y, Yb)
K.-y. Chiu, Z. Zhang, T.C.W. Mak, Z. Xie 107

Rhodium cyclooctadiene complexes of the weakly co-ordinating carborane anion [*closo*-$CB_{11}H_{12}]^-$. Isolation and crystal structures of [(COD)Rh(η^2-$CB_{11}H_{12}$)] and [(COD)Rh$(THF)_2$][$CB_{11}H_{12}$]
A.S. Weller, M.F. Mahon, J.W. Steed 113

Fluorination studies of the [commo-3,3′-Co(3,1,2-$CoC_2B_9H_{11})_2^{-1}$] ion
A.N. Gashti, J.C. Huffman, A. Edwards, G. Szekeley, A.R. Siedle, J.A. Karty, J.P. Reilly, L.J. Todd 120

Hybrid diborolyl/carbaboranyl triple-decker compounds: [(η^5-pentamethylcyclopentdienyl)ruthenium(μ,η^5-1,3-diborolyl)rhodiumcarbaboranyl] complexes
T. Müller, D.E. Kadlecek, P.J. Carroll, L.G. Sneddon, W. Siebert 125

Oligonuclear cyanide complexes from silver containing building blocks
V. Comte, Z.-N. Chen, M.-L. Flay, H. Vahrenkamp 131

Platinum complexes of stanna-*closo*-dodecaborate
T. Marx, L. Wesemann 137

Kinetic studies of reactions of hexaborane(10) with other binary boranes in the gas phase
M.D. Attwood, R. Greatrex, N.N. Greenwood, C.D. Potter 144

Closo and semipseudocloso forms of the same carbametallaborane: synthesis and spectroscopic and crystallographic characterisation of 1-CCPh-2-Ph-3-(η-L)-3,1,2-$RhC_2B_9H_9$ (L = C_5H_5 and C_5Me_5): Part 25. Steric effects in heteroboranes
R.M. Garrioch, G.M. Rosair, A.J. Welch 153

Transformation of cyclohexadiene on an Fe_3P frame: cluster complexes with hexadiene, cyclohexadiene and arene ligands
H. Wadepohl, S. Gebert, H. Pritzkow 158

Hydridoborates and hydridoborato metallates: Part 26. Preparation and structures of dihydridoborates of lithium and potassium
J. Knizek, H. Nöth 168

Convenient syntheses, spectroscopic and structural characterisation of bi-functional boranes
S. Aldridge, R.J. Calder, M.H. Cunningham, K.M.A. Malik, J.W. Steed 188

Structures of carborane cations derived from the reaction of 2-propyl cation with diborane: DFT/IGLO/GIAO-MP2/NMR investigations of alkylborane and alkylcarborane patterns
G. Rasul, G.K. Surya Prakash, L.D. Field, G.A. Olah, R.E. Williams 195

Boride cluster fusion through copper and silver. Crystal structure of [$(Ph_3P)_2N$][$(HRu_4(CO)_{12}BH)_2Ag$]
C.E. Housecroft, S.M. Draper, A.D. Hattersley, A.L. Rheingold 202

Monocarbollide complexes of osmium: X-ray crystal structure of [$Os(CO)_3\{\eta^5$-5-(NMe_3)-7-$CB_{10}H_{10}\}$]
D.D. Ellis, A. Franken, T.D. McGrath, F.G.A. Stone 208

Synthesis of N-substituted derivatives of the *hypho*-(amine)(amino)B_8H_{11} system
U. Dörfler, C. Bauer, D. Gabel, N.P. Rath, L. Barton, J.D. Kennedy 215

Synthesis and characterization of μ,μ'-$M(B_5H_8)_2$ (M = Cd, Hg and Zn): a reassignment of the NMR spectra for 2,3-μ-metalloderivatives of pentaborane(9)
H. Fang, J. Bould, J. Braddock-Wilking, L. Barton 223

Reactivity of the mixed-metal cluster [$Os_6(CO)_{17}(Au_2dppm)$] towards gold electrophiles (dppm = $Ph_2PCH_2PPh_2$)
Z. Akhter, J.F. Gallagher, J. Lewis, P.R. Raithby, G.P. Shields 231

Octakis(trimethylsilylmethyl)dioxotetramolybdenum. A novel tetranuclear compound with two localized metal–metal triple bonds
M.H. Chisholm, D.R. Click, J.C. Huffman 238

Synthesis, characterization, structural and theoretical analysis of a series of electron deficient, monomeric thallium iron carbonylate isostructural and isolobal to diiron nonacarbonyl
K.H. Whitmire, I.Y. Guzman-Jimenez, J.-Y. Saillard, S. Kahlal 243

Synthesis of a water soluble boron neutron capture therapy agent: 1-amino-3-[2-(7-{3-[2-(2-hydroxymethyl-ethoxy)-1-(2-hydroxy-1-hydroxymethyl-ethoxymethyl)ethoxy]propyl}-1,7-di-carba-*closo*-dodecaboran-1-yl)ethyl]cyclobutanecarboxylic acid
B.C. Das, G.W. Kabalka, R.R. Srivastava, W. Bao, S. Das, G. Li 255

Gas-phase reactions of *nido*-1-methylpentaborane with propyne and 2-pentyne. Formation of B-alkyl *nido* and *closo* carbaboranes
M.A. Fox, R. Greatrex, M. Hofmann, P. von Ragué Schleyer 262

Eleven-vertex polyhedral metalladicarbaborane chemistry. Reactions of neutral *nido*-5,6-$C_2B_8H_{12}$ and the [*nido*-6,9-$C_2B_8H_{10}$]$^{2-}$ anion to give formally *closo* isomeric 1-(arene) and 1-(cyclopentadiene)-1,2,4- and 1,2,3-metalladicarbaundecaboranes, and some substituent chemistry. Chiral separations, and crystal and molecular structures of [5-Br-1-(η^6-C_6Me_6)-1,2,4-$RuC_2B_8H_9$] and [2-Me-1-(η^5-C_5Me_5)-1,2,3-$RhC_2B_8H_9$]
M. Bown, B. Grüner, B. Štíbr, X.L.R. Fontaine, M. Thornton-Pett, J.D. Kennedy 269

New hexacyclic binuclear tin complexes derived from bis-(3,5-di-*tert*-butyl-2-phenol)oxamide
V.M. Jímenez-Pérez, C. Camacho-Camacho, M. Güizado-Rodríguez, H. Nöth, R. Contreras 283

New Ni–Rh carbonyl clusters with unprecedented structural and electronic features: synthesis and X-ray structure of $[NEt_4]_3[Ni_{10}Rh(CO)_{19}]\cdot C_2H_5CN$, $[NMe_3CH_2Ph]_3[Ni_6Rh_3(CO)_{17}]$ and $[NEt_4]_3[Ni_9Rh_3(CO)_{22}]$
C. Femoni, F. Demartin, M.C. Iapalucci, A. Lombardi, G. Longoni, C. Marin, P.H. Svensson 294

Notes

Synthesis and crystal structure of $[H_2B(3\text{-}Phpz)_2]_2Zn$
D.J. Darensbourg, J.C. Yarbrough 305

Polyhedral-based nonlinear optical materials: Part 1. Theoretical investigation of some new high nonlinear optical response compounds involving carboranes and charged aromatic donors and acceptors
D.G. Allis, J.T. Spencer 309

Asymmetric synthesis of the Japanese beetle pheromone via boronic esters
W.C. Hiscox, D.S. Matteson 314

Polycarbon linked metal cluster compounds
D.M. Norton, D.F. Shriver 318

Author Index of Volumes 614–615 323
Subject Index of Volumes 614–615 325
Contents of Volumes 614–615 331